

## **REMARKS/ARGUMENTS**

The Examiner has rejected claims 1-2, 7, 12, 21, 23-24, 26 and 28 under 35 U.S.C. 103(a) as being obvious in view of LaMedica Jr. (U.S. Patent No. 7,024,161) and newly cited Miller et al. (U.S. Patent No. 6,879,693). The remainder of the claims are rejected as being obvious in view of: LaMedica Jr., Miller et al. and newly cited Feng (U.S. Patent No. 7,206,423); LaMedica Jr. and Feng; LaMedica Jr., Miller et al. and Harrel et al. (U.S. Patent Pub. No. 2003/0073408); or LaMedica Jr., Miller et al. and Official Notice.

### **Claims 1-13 and 23-30**

In the last Office Action, the Examiner stated that LaMedica, Jr. discloses all of the features of independent claims 1 and 23 except for the test signal being a microphone audio test signal. The Examiner relied on Bakis (U.S. Patent No. 5,822,718) as teaching a microphone audio test signal. The Examiner no longer relies on Bakis. Instead, the Examiner now states that LaMedica, Jr. discloses producing the microphone electric audio test signal on an audio generator external to the mobile voice-enabled communications device, and providing the microphone electric audio test signal to an external speaker. The reasons for the Examiner's change in position have not been stated.

As stated in the previous response, while LaMedica, Jr. describes a test system which utilises an external microphone and external speaker, it does not disclose test signals configured to test the internal microphone or speaker of the wireless device under test. Rather, the tests and signals in LaMedica, Jr. are related to wireless services and connection to the wireless network rather than testing the internal microphone or internal speaker themselves. In short, LaMedica, Jr. does not disclose a microphone audio test signal configured to test the internal microphone of the wireless device under test.

The Examiner states that Miller et al. discloses the testing of a device wherein the microprocessor routes signals from the microphone to the auxiliary output

device during testing for the purpose of assessing the performance of device actuators. Respectfully, the Examiner appears to have misconstrued the teachings of this reference. Miller et al. is directed to testing a hearing aid system that includes implanted actuators (e.g., a microphone implanted in a patient). The passages at col. 8, line 63 to col. 9, line 5, which were cited by the Examiner state:

When employed in conjunction with a semi-implantable system, the RF test signal from the reference transmitter 308 may be provided to the external transmitter 204 (e.g. via an input port which would normally receive a jack at the end of wire 202 for acoustic signal input from the microphone 208 and SSP 318). In turn, the external transmitter 204 inductively couples the RF test signal to the implanted receiver 118, which provides the RF test signal to the signal processor 104. The signal processor 104 extracts and conditions the test signal and supplies the test signal to the transducer 108.

(Emphasis Added)

The above passage shows that, during testing, an RF test signal originates from a reference transmitter rather than the external microphone 208 as suggested by the Examiner. While the RF test signal may be provided to the external transmitter 204 from the reference transmitter via an input port which would normally receive a jack at the end of the wire 202 for acoustic signal input from the external microphone 208 and SSP 318, the RF signal is not “directly” routed from the external microphone 208 of the hearing aid using its built-in processor as required by the claims. Moreover, the RF signal is not configured to test the implanted microphone 322 of the implanted portion of the hearing aid (i.e., the device under test). Furthermore, the routing is not performed by the microprocessor of the device under test (this would be the implanted signal processor 104 in Miller et al.). Instead, the RF signal is routed to the external transmitter 204 from the test measurement device 328 in which the reference transmitter is provided. Thus, there is no “direct routing” from the microprocessor of the device under test to the auxiliary I/O device as required by the claims.

Thus, LaMedica Jr. and Miller et al., in combination, fail to disclose all of the features of independent claims 1 and 23. Moreover, there is nothing in the cited references which would suggest modifying the teachings of the LaMedica Jr. or Miller et al. to arrive at the subject matter of claims 1 and 23. Thus, claims 1 and 23 are patentable in view of LaMedica Jr. and Miller et al.

Claims 2-7, 9, 10, 12, 13 and 24-26 and 28-30 depend directly or indirectly from independent claims 1 or 23, and are considered to be directed to patentable subject matter for at least the same reasons given for the base independent claims from which they depend.

#### Claims 14-22 and 31-37

In the last Office Action, the Examiner stated that LaMedica, Jr. discloses all of the features of independent claims 14 and 31 except for the test signal being a speaker test audio signal. The Examiner relied on Konetski et al. (U.S. Patent No. 7,006,637) as teaching a speaker test audio signal. The Examiner no longer relies on Konetski et al. Instead, the Examiner now states that LaMedica, Jr. discloses producing the speaker electric audio test signal and providing this as input to the wireless device under test via the auxiliary input/output (I/O) device. The reasons for the Examiner's change in position have not been stated.

As stated in the previous response, while LaMedica, Jr. describes a test system which utilises an external microphone and external speaker, it does not disclose test signals configured to test the internal microphone or speaker of the wireless device under test. Rather, the tests and signals in LaMedica, Jr. are related to wireless services and connection to the wireless network rather than testing the internal microphone or internal speaker themselves. In short, LaMedica, Jr. does not disclose a speaker audio test signal configured to test the internal speaker of the wireless device under test.

The Examiner states that Feng discloses the testing of a device wherein the microprocessor routes signals from the auxiliary I/O device to the speaker to perform diagnostics and maintenance on the device. Respectfully, the Examiner

appears to have misconstrued the teachings of Feng. Feng is directed to a hearing aid system which includes a pair of acoustic I/O components 30a, 30b (ear pieces), one for each ear of a patient, and a processing component 30c separate from the ear pieces. The processing component 30c could resemble a common wrist watch device as shown in FIG 1.

The passages at col. 4, line 42 to 52, which were cited by the Examiner state:

Processing component 30c also includes user input control 46 and auxiliary output 48. Control 46 can be utilized to change user-selectable parameters for signal processing subsystem 44. Alternatively or additionally, control 46 can provide for selection between different signal processing arrangements for system 20, such as those described in connection with FIGS. 6 15 to name just a few. Auxiliary output 48 can be used to perform diagnostics and maintenance for system 20 and/or to provide output signals from component 30c to a loudspeaker as an addition or alternative to earphones 24a, 24b.

(Emphasis Added)

The above passage, cited by the Examiner, describes only an auxiliary output 48. There is no suggestion of inputting a signal of any kind, let alone a speaker electric audio test signal as required by the claims. In addition, there is nothing to suggest that the auxiliary output 48 could be, or be replaced, with an auxiliary input/output device. There is no reason for doing so in Feng. Moreover, the auxiliary output 48 is part of the processing component 30c, not the input/output components 30a, 30b. Thus, the microprocessor (processing subsystem 44) and speakers (earphone 24a, 24b) are not both part of the device under test as required by the claims. Thus, it is not possible to “directly route” any signals to the speaker speakers (earphone 24a, 24b) of the device under test (input/output components 30a, 30b) as required by the claims.

Thus, LaMedica Jr. and Feng, in combination, fail to disclose all of the features of independent claims 14 and 31. Moreover, there is nothing in the cited references

which would suggest modifying the teachings of the LaMedica Jr. or Feng to arrive at the subject matter of independent claims 14 and 31. Thus, claims 14 and 31 are patentable in view of LaMedica Jr. and Feng.

Claims 15-19, 21, 22 and 24-26 and 32-34, 36, and 37 depend directly or indirectly from independent claims 14 or 31, and are considered to be directed to patentable subject matter for at least the same reasons given for the base independent claims from which they depend.

Favourable reconsideration and allowance of the application are respectfully requested. If a telephone call would advance the application, please contact the undersigned.

Respectfully submitted,

**RIDOUT & MAYBEE LLP**

Date: September 16, 2008

By \_\_\_\_\_/SM/  
Stephen Martin  
Registration No. 56,740  
Telephone (416) 865-3508  
Fax (416) 362-0823

RIDOUT & MAYBEE LLP  
225 King Street West  
10<sup>th</sup> Floor  
Toronto, Ontario  
M5V 3M2  
Canada